

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-9. (cancelled)

10. (currently amended) ~~The information transmission method according to claim 7, further comprising the step of:~~ An information transmission method comprising the steps of:

monitoring transmission bandwidth for transmitting data to and receiving data from a transmitter terminal,

determining a procedure of requesting for data with a request for transmission being employed as input,

controlling a service method of a cache in accordance with information on bandwidth of said transmitter terminal and said request for data,

monitoring transmission bandwidth for transmitting data to and receiving data from a receiver terminal,

allowing a user to input said request for transmission at said receiver terminal,

controlling a service method of said cache in accordance with information on bandwidth of said receiver terminal, and

allowing program information and contents management information containing a description of a location of program-related information to be inputted, acquiring and

accumulating the program-related information automatically in advance by a receiver side before or in response to progress of a program, and presenting the information acquired in advance by the receiver side in response to a program rating.

11-13. (cancelled)

14. (currently amended) ~~The information transmission method according to claim 7, further comprising the step of:~~ An information transmission method comprising the steps of:

monitoring transmission bandwidth for transmitting data to and receiving data from a transmitter terminal,

determining a procedure of requesting for data with a request for transmission being employed as input,

controlling a service method of a cache in accordance with information on bandwidth of said transmitter terminal and said request for data,

monitoring transmission bandwidth for transmitting data to and receiving data from a receiver terminal,

allowing a user to input said request for transmission at said receiver terminal,

controlling a service method of said cache in accordance with information on bandwidth of said receiver terminal, and

allowing contents having a time constraint and communication rate as supplementary information to be inputted, transmitting accumulated converted contents having the same description as that of said contents and having the same supplementary information as said supplementary information, converting a size of said

inputted contents in accordance with said supplementary information if corresponding accumulated converted contents are not available, and accumulating and transmitting converted contents in conjunction with supplementary information containing both a name and a size of non-converted contents to thereby transmit contents at the specified communication rate within a specified length of time while conversion time is being saved.

15. (currently amended) ~~The information transmission method according to claim 7, further comprising the step of:~~ An information transmission method comprising the steps of:

monitoring transmission bandwidth for transmitting data to and receiving data from a transmitter terminal,

determining a procedure of requesting for data with a request for transmission being employed as input,

controlling a service method of a cache in accordance with information on bandwidth of said transmitter terminal and said request for data,

monitoring transmission bandwidth for transmitting data to and receiving data from a receiver terminal,

allowing a user to input said request for transmission at said receiver terminal,

controlling a service method of said cache in accordance with information on bandwidth of said receiver terminal, and

upon transmission of accumulated contents, allowing said contents to be attached with supplementary information corresponding to a condition of said

accumulated contents and transmitted, said contents with said supplementary information to be received, and said supplementary information to be displayed by said receiver terminal.

16-17. (cancelled)

18. (currently amended) ~~The information transmission method according to claim 7, further comprising the step of:~~ An information transmission method comprising the steps of:

monitoring transmission bandwidth for transmitting data to and receiving data from a transmitter terminal,

determining a procedure of requesting for data with a request for transmission being employed as input,

controlling a service method of a cache in accordance with information on bandwidth of said transmitter terminal and said request for data,

monitoring transmission bandwidth for transmitting data to and receiving data from a receiver terminal,

allowing a user to input said request for transmission at said receiver terminal,

controlling a service method of said cache in accordance with information on bandwidth of said receiver terminal, and

in accordance with a result of analysis of information, allowing the information to be converted into and transmitted in at least one or more forms of an actual information

body, a description of storage source of the information, and a condition for acquiring the information from the storage source of the information.

19-20. (cancelled)

21. (currently amended) ~~The information transmission system according to claim 19, further comprising~~ An information transmission system comprising

a transmitter terminal communication interface for transmitting data to and receiving data from at least one transmitter terminal,

a transmitter terminal bandwidth monitor portion for monitoring a transmission bandwidth for transmitting data to and receiving data from said transmitter terminal,

a storage portion for accumulating data,

a request management portion for allowing a request for a transmission to be inputted and determining a procedure of the request to be outputted,

a data management portion for controlling a method for using said storage portion in accordance with bandwidth information of the transmitter terminal monitored by said transmitter terminal bandwidth monitor portion and the request from said request management portion, and

a data interpretation portion for interpreting a description of data acquired by said data management portion, extracting a data address considered being requested subsequently, and determining an order of the request in accordance with a transmission condition to request said request management portion for data.

22. (cancelled)

23. (currently amended) ~~The information transmission system according to claim 19, further comprising a~~ An information transmission system comprising

a transmitter terminal communication interface for transmitting data to and receiving data from at least one transmitter terminal,

a transmitter terminal bandwidth monitor portion for monitoring a transmission bandwidth for transmitting data to and receiving data from said transmitter terminal,

a storage portion for accumulating data,

a request management portion for allowing a request for a transmission to be inputted and determining a procedure of the request to be outputted,

a data management portion for controlling a method for using said storage portion in accordance with bandwidth information of the transmitter terminal monitored by said transmitter terminal bandwidth monitor portion and the request from said request management portion,

wherein the database management portion having at least one or more of recording time management means for managing a recording time of the acquired information,

reference time management means for managing a reference time of the acquired information,

search key management means for managing a search key provided for the acquired information, and

copy status management means for managing a copy status of the acquired information.

24. (currently amended) ~~The information transmission system according to claim 19, further comprising~~ An information transmission system comprising
a transmitter terminal communication interface for transmitting data to and receiving data from at least one transmitter terminal,
a transmitter terminal bandwidth monitor portion for monitoring a transmission bandwidth for transmitting data to and receiving data from said transmitter terminal,
a storage portion for accumulating data,
a request management portion for allowing a request for a transmission to be inputted and determining a procedure of the request to be outputted,
a data management portion for controlling a method for using said storage portion in accordance with bandwidth information of the transmitter terminal monitored by said transmitter terminal bandwidth monitor portion and the request from said request management portion, and
a transfer control portion for acquiring requested data from said data management portion in response to a request from said request management portion, and processing the data acquired from said data management portion as necessary in accordance with a transmission condition from said request management portion or said data management portion.

25. (original) The information transmission system according to claim 24, further comprising a capacity monitor portion for monitoring a storage capacity of said storage portion, wherein

said data management portion selects at least one of storing in said storage portion, transferring to said transfer control portion, and discarding data inputted at said transmitter terminal communication interface or data specified by said transfer control portion and acquired from said storage portion, in accordance with at least one of a transmission condition from said transmitter terminal inputted at said transmitter terminal communication interface, bandwidth information of said transmitter terminal monitored by said transmitter terminal bandwidth monitor portion, and storage capacity information of said storage portion monitored by said capacity monitor portion, as well as sends transfer control information to said transfer control portion.

26. (original) The information transmission system according to claim 24, further comprising a transmitter terminal bandwidth control portion for managing and controlling transmission bandwidth of said transmitter terminal communication interface, and a schedule management portion for issuing a request specified by said request management portion to said transmitter terminal communication interface at time specified by or timing specified by said request management portion,

said information transmission system wherein

concerning said request for a transmission, said request management portion outputs an inquiry for presence or absence of data in conjunction with a transmission condition to said transfer control portion and transmits the stored data in accordance with the transmission condition,

if the stored data does not exist, said request management portion transmits bandwidth control information to said transmitter terminal bandwidth control portion in

accordance with at least one of a type of requested data, a transmission condition from said transmitter terminal acquired from said transfer control portion, a transmission condition of the system acquired from said transfer control portion, and bandwidth information of the transmitter terminal monitored by said transmitter terminal bandwidth monitor portion, and

said request management portion determines a request procedure and then allows said transmitter terminal communication interface to transmit the request to said transmitter terminal, the request to be outputted to said schedule management portion in conjunction with a request transmission schedule, or the request having already been held in said schedule management portion to be outputted.

27-28. (cancelled)

29. (currently amended) ~~The information transmission system according to claim 27, further comprising~~ An information transmission system comprising

a transmitter terminal communication interface for transmitting data to and receiving data from at least one transmitter terminal,

a transmitter terminal bandwidth monitor portion for monitoring a transmission bandwidth for transmitting data to and receiving data from said transmitter terminal,

a storage portion for accumulating data,

a request management portion for allowing a request for a transmission to be inputted and determining a procedure of the request to be outputted,

a data management portion for controlling a method for using said storage portion in accordance with bandwidth information of the transmitter terminal monitored by said transmitter terminal bandwidth monitor portion and the request from said request management portion,

a receiver terminal communication interface for transmitting data to and receiving data from at least one receiver terminal,

a receiver terminal bandwidth monitor portion for monitoring transmission bandwidth for transmitting data to and receiving data from said receiver terminal,

means for inputting said request for a transmission at said receiver terminal,

said information transmission system wherein

said data management portion has further a function for controlling a method for using said storage portion in accordance with the bandwidth information of the receiver terminal monitored by said receiver terminal bandwidth monitor portion, and

a transfer control portion for acquiring requested data from said data management portion in response to a request from said request management portion, and processing the data acquired from said data management portion as necessary to be transmitted from said receiver terminal communication interface to said receiver terminal in accordance with a transmission condition from said request management portion or said data management portion.

30. (original) The information transmission system according to claim 29, further comprising

a receiver terminal bandwidth control portion for managing and controlling transmission bandwidth of said receiver terminal communication interface, and
a capacity monitor portion for monitoring a storage capacity of said storage portion, wherein

said data management portion selects at least one of storing in said storage portion, transferring to said transfer control portion, and discarding data inputted at said transmitter terminal communication interface or data specified by said transfer control portion and acquired from said storage portion, in accordance with at least one of a transmission condition from said transmitter terminal inputted at said transmitter terminal communication interface, a transmission condition from said receiver terminal inputted at said transfer control portion, bandwidth information of the receiver terminal monitored by said receiver terminal bandwidth monitor portion, bandwidth information of the transmitter terminal monitored by said transmitter terminal bandwidth monitor portion, and storage capacity information of said storage portion monitored by said capacity monitor portion, as well as sends bandwidth control information to said receiver terminal bandwidth control portion and transfer control information to said transfer control portion.

31. (original) The information transmission system according to claim 29, further comprising

a transmitter terminal bandwidth control portion for managing and controlling transmission bandwidth of said transmitter terminal communication interface, and a schedule management portion for issuing a request specified by said request

management portion to said transmitter terminal communication interface at time specified by or timing specified by said request management portion,

said information transmission system wherein

concerning a request received by said receiver terminal communication interface from said receiver terminal, said request management portion outputs an inquiry for presence or absence of data in conjunction with a transmission condition to said transfer control portion and transmits the stored data in accordance with the transmission condition,

if the stored data does not exist, said request management portion transmits bandwidth control information to said transmitter terminal bandwidth control portion in accordance with at least one of a type of requested data, a transmission condition from said transmitter terminal acquired from said transfer control portion, a transmission condition of the system acquired from said transfer control portion, and bandwidth information of the transmitter terminal monitored by said transmitter terminal bandwidth monitor portion, and

said request management portion determines a request procedure and then allows said transmitter terminal communication interface to transmit the request to said transmitter terminal, the request to be outputted to said schedule management portion in conjunction with a request transmission schedule, or the request having already been held in said schedule management portion to be outputted.